DOCUMENT RESUME

ED 115 964 95 CE 005 859

TITLE	Career Education for Persons in Rural Areas. Primary Focus on Adults 16 and Over. Third Party Evaluation Report.
INSTITUTION	North Central Technical Inst., Wausau, Wis.; Wisconsin Univ., Madison. Center for Studies in Vocational and Technical Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
REPORT NO	VT-102-359
BUREAU NO	F5005VW; V361036
PUB DATE	Jun 75
GRANT	OEG-0-73-5292
NOTE	66p.; For related document, see CE 005 858
EDRS PRICE	MF-$0.76 HC-$3.32 Plus Postage
DESCRIPTORS	*Adult Education; *Career Education; Developmental Programs; *Economically Disadvantaged; Elementary Secondary Education; Program Effectiveness; *Program Evaluation; *Rural Areas
IDENTIFIERS	*Wisconsin

ABSTRACT

The third party evaluation report focuses on the second year activities of a three-year exemplary project in career education conducted by the North Central Technical Institute (NCTI). The project was designed to provide career education activities to the adult population of an economically depressed rural area in north-central Wisconsin. Job upgrading and retraining, career information dissemination, and inservice education were carried out through workshops, counseling, classes, group sessions, displays, tours, and informational meetings. Initially, the report deals with such areas as communication, adults 16 and over, women, agency cooperation, NCTI staff, school participation, and personnel. The second part of the report is concerned with the results of the efforts of the staff in selected elementary and secondary schools in the NCTI district. Overall, the school systems accepted the project consultants and the concept of career education, although with varying degrees of effectiveness. This acceptance was regarded as an indication of the need for such services. It was found that the efforts of the project staff were often frustrated by the personal characteristics of the target population, as the staff was prevented from dealing with them in groups such as classes or other captive situations. (NJ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED115964

THIRD PARTY EVALUATION REPORT

OF

CAREER EDUCATION FOR PERSONS IN RURAL AREAS — PRIMARY FOCUS ON ADULTS 16 AND OVER

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

North Central Technical Institute
1000 Schofield Avenue
Wausau, Wisconsin 54401

Project No. V361036
Contract No. OEG-0-73-5292

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CE 005 859

CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION
University of Wisconsin-Madison

2/3

June, 1975

VT102359

CONTENTS

		Page
Preface		i
Chapter		
I.	Introduction	1
	Demographic Setting	1
	Objectives of the North Central Area Board of Vocational, Technical and Adult Education	3
	Objectives for Career Education for Persons in Rural Areas-Primary Focus on Adults 16 and Over	4
	The Exemplary Project Undergirds North Central Technical Institute District Objectives	6
	Observations	8
	Recommendations	9
II.	The Scope of the Project	12
	Communications	12
	Observations	13
	Recommendations	14
	Adults 16 Years and Over	14
	Observations	16
	Recommendations	17
	Women	17
	Observations	18
	Recommendations	18
	Agency Cooperation	19
	Observations	20
	Recommendations	20
	North Central Technical Institute Staff	20
	Observations	21
	Recommendations	22
	School Participation	22
	Observations	26
	Recommendations	26
	Personnel	27
	Observations	28
	Recommendations	29
III.	Evaluation at Grades 3,6,9 and 12	31
	Self Awareness	33
	Grades 3	33
	Observations	35
	Grades 6	36
	Observations	37

CONTENTS (Cont's)

Chapter		Page
	Career Awareness Grades 3 and 6	38
	Observations	41
	Career Development Assessment	42
	Grades 9	42
	Observations	43
	Grades 12	44
	Observations	45
	Recommendations	47
IV.	Summary and Recommendations	48
	Recommendations	51

TABLES

Table		Page No.
I.	Summary of Test Results for Self Awareness for Grades Three	35
II.	Summary of Test Results for Self Awareness for Grades Six	37
III.	Means for Control vs. Experimental, T-Values and Significance for Grades Three and Six	39
IV.	Summary of Test Results for Occupational Characteristics, Occupational Preparation Requirements, A General Survey of Exploratory Occupational Experiences, Career Planning Knowledge and Career Planning Involvement for Grades Nine	42
V.	Summary of Test Results Relative to Exploratory Occupational Experiences Related to Occupational Clusters for Grades Nine	43
VI.	Summary of Test Results for Occupational Characteristics, Occupational Preparation Requirements, A General Summary of Exploratory Occupational Experiences, Career Planning Knowledge and Career Planning Involvement for Grades Twelve	44
VII.	Summary of Test Results Relative to Exploratory Occupational Experiences Related to Occupational Clusters for Grades Twelve	45

PREFACE

This report represents a third party evaluation of the exemplary project, "Career Education for Persons in Rural Areas, Primary Focus on Adults 16 and Over" funded by the United States Office of Education under "The Vocational Education Amendments of 1968." This assessment focuses on the activities of the second year of an anticipated 3 year project. Evaluation services were provided under a contract with the Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison.

There are two aspects of the evaluation. First, the report deals with such areas as Communication, Adults 16 Years and Over, Women, Agencies, North Central Staff, School Participation, and Personnel. The second part of the report deals with the results of the efforts of the staff in selected schools, elementary and secondary, located in the North Central Technical Institute District (NCTI), Wausau. For this purpose, the procedure for evaluation was used as outlined in the Draft Guidelines for the Evaluating of Career Education Programs submitted to the U.S. Office of Education by Development Associates Incorporated, Washington, D.C.

The scope of the evaluation was outlined by Dr. Russell Paulson, Project Director, "Guidelines for Evaluation of Career Education," the contract with the Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison.

The evaluation was carried on by:

> Merle E. Strong, Director, Center for Studies in Vocational and Technical Education and Professor, Department of Educational Administration, University of Wisconsin, Madison, Evaluation Chairman;

Henry C. Ahrnsbrak, Professor Emeritus, Department of Educational Administration, Project Consultant, Center for Studies in Vocational and Technical Education.

This is the second and official edition of the third party evaluation of Career Education for Persons in Rural Areas - Primary Focus on Adults 16 and Over, Exemplary Project in Vocational Education conducted by North Central Technical Institute under Part D of Public Law 90-576. The first edition was issued minus the treatment and control group test results to enable the director of the project to make his interim report. The test results were not to change, in the opinion of the evaluators, the recommendations for the continuation of the project and, therefore, an incomplete report was considered permissable and the first edition was issued.

INTRODUCTION

This chapter sets forth a demographic setting for the North Central Technical Institute (NCTI) operations and hence this project; the objectives of the NCTI whereby to meet the needs of the people of the District; and the objectives of the Exemplary Project in Vocational Education-Career Education for Persons in Rural Areas-Primary Focus on Adults 16 and Over.

Demographic Setting*

The North Central Vocational, Technical and Adult Education District is one of 16 post-secondary education districts in Wisconsin charged by the legislature with providing vocational, technical and adult education opportunities to the inhabitants it serves. The District consists of Price and Menomines counties and portions of Marathon, Langlade, Lincoln, Clark, Taylor, Shawano, Portage and Waupaca counties.

Population

The total population of the North Central Institute District in 1970 was 327,142. Minorities numbered 3,743 or 1.2 percent. The largest minority group is American Indians.

Over 58 percent of the total population lives in rural areas, 54,211 on farms and another 136,510 in rural non-farm areas. This is almost twice the state average of rural population.

Men make up 99.6 percent of the population and women 50.4 percent. About three-fourths of the men 16 years of age and over are working or are looking for

---

* Third Party Evaluation Report of Career Education For Persons In Rural Areas-Primary Focus on Adults 16 and Over, Center For Studies in Vocational, Technical and Adult Education, May, 1974, Madison, Wis.

work. Of women 16 years of age and over only about 39 percent are in the labor force but studies show an increasing proportion of women have been entering the labor force in recent years.

Poverty

In 1969, 7,928 families or 9.1 percent of all families in the District had incomes less than the poverty level of $3,800 for a non-farm family of four. The total number of persons who were poor, including family heads, spouses, children, and other people not living with relatives was 38,614 or 12.1 percent of all persons. If you allowed the poverty level to be one quarter higher (i.e. $4,750) income for a family of four, then over 12,000 families and 47,000 persons would fall into the poverty class.

Employment

In 1971, employment in the District averaged 123,300 - about the same as 1970. Over 80 percent of the employed have non-farm wages and salary jobs, 12 percent are employdd on farms, and the balance are made up of non-farm self-employed persons, unpaid family workers and household servants.

An estimated average of 8,290 persons or 6.3 percent of the work force were unemployed in 1971.

Reservation Indians

An estimated 2,173 Indians are living within or adjacent to reservations in the North Central District. Of persons 16 years and over in the labor force, 409 are employed, 369 are considered unemployed, and 107 of the unemployed are actively seeking work. A total of 329 persons 16 years and over are not in the labor force because they are students, are physically or mentally disabled, are retired or institutionalized, housewives or are women for whom no child care substitutes are available.

Welfare Recipients

A total of 1,765 families were on the Aid to Families with Dependent Children (AFDC) regular program, and 82 families on the Unemployed Parent Component were reported for the District as of July 1972. In addition, 395 children in foster homes and licensed child care institutions were covered by AFDC. General Relief cases totaled 515.

School Enrollment

In 1970, 100,024 persons 3 to 34 years old were enrolled in District schools. Elementary school enrollment was 57,605; high school 26,890, and 9,255 persons were enrolled in college.

Objectives of the North Central Area Board of Vocational, Technical, And Adult Education

To meet the educational challenge of its district population the North Central District Board adopted the following set of objectives as set forth in the Institutional Profile, Area Board of the North Central Vocational, Technical and Adult Education District, December 1, 1972.

1. To prepare persons for employment in a wide variety of mid-management, technical, skilled and semi-skilled positions.
2. To upgrade the capabilities of persons employed, to enable them to maintain employment by keeping abreast of technological advance and/or to advance in their field of employment.
3. To develop in employed persons new capabilities to meet their desires or to cope with the necessity for job change.
4. To assist persons in self-evaluation and determination of career direction through testing, counseling and guidance so that they may, through education, realize their maximum employment potential.
5. To provide an opportunity to remove deficiencies according to indi-

vidual needs of people who lack adequate proficiency in background courses necessary for success in the vocational or technical curriculum they need to pursue.

6. To encourage and provide opportunity for persons presently employed to become involved in education related to employment, to also develop as an individual to meet responsibilities as a member of a family and citizen in a free society.

7. To provide area leadership, education programs, education services and facilities, consistent with the institution's objectives, desired by the persons in the North Central Vocational, Technical and Adult Education District.

Objectives for Career Education for Persons In Rural Areas-Primary Focus On Adults 16 and Over*

1. To increase career education activities to those persons 16 years old and older for those persons--
   a. presently in high school, public and private,
   b. presently unemployed, and
   c. presently employed.

   To enable them to obtain employment, advance in their present employment or to transfer to more appropriate alternatives, by helping them become aware of their abilities, provide career awareness experiencee, career exploration activities and career preparation programs.

2. To develop career awareness materials. Emphasis to be placed on "mini-course" development concept, and transportability feature for dissemination ,particularly as they relate to broadcast educational television.

3. TO expand career awareness programs at K-6 grade level.

4. To expand career awarensss of the world

*Third Party Evaluation Report of Career Education For Persons in Rural Areas-Primary Focus on Adults 16 and Over, Center for Studies in Vocational, Technical and Adult Education, May, 1974, Madison, Wis.

of work to junior high or middle school.

5. To expand career education activities to small rural high schools where a high percentage of the student body are from disadvantaged, low income families.

6. To provide career awareness programs for the parents of high school seniors who in the fall semester are undecided as to immediate career objectives (approximately 15%).

7. To provide summer career exploration activities to those youth presently 16 years old or over, who are in high school and/or work experience programs.

8. To provide counseling services and career information for the mature women who wish to re-enter the labor market.

9. To expand career awareness, career exploration and career preparation activities to Vietnam veterans.

10. To expand the articulation of curriculum development in career preparation as depicted in the career education model (see Appendix) between high school vocational programs and post-secondary vocational-technical education programs in at least four programs the first year.

11. To expand career awareness and career counseling services to those persons 16 years old and over:
    a. in high school
    b. in post-secondary vocational preparatory programs
    c. at least 10% of those persons presently unemployed who are registered with the Wausau office of the Wisconsin State Employment Service
    d. at least 2000 adults presently employed
    e. women who desire to prepare to re-enter the labor market.
    f. American Indians
    g. rural disadvantaged whites

12. To identify and disseminate employment opening

information within the district, and where feasible within the state.

13. To provide information on post-secondary vocational, technical program openings to high schools within the district.

14. To expand part-time career preparation opportunities for those persons over 16 years of age by four new courses per year (two per semester) to serve approximately 50-60 persons.

The section to follow will compare in a general way the objectives of the NCTI and the objectives of the Exemplary Project. First, the comparison is to indicate that the Project's objectives are coterminous with specific objectives of the NCTI and generally with others. Secondly, the comparison will highlight those areas of service which the NCTI Area Board should consider funding when Federal funds terminate the project.

The Exemplary Project Undergirds N.C.T.I.
District Objectives

The purpose of this section of the report is to show that the Project staff members, in pursuing the objectives of the Exemplary Project, have implemented and enhanced the objectives of the NCTI Area District Board, some more than others. The Exemplary Project has carried out objectives which up until the establishment of the Project had received passing efforts more or less in the daily routine activities of the staff of the NCTI. This review of NCTI objectives and the objectives of the Exemplary Project will have implications for the NCTI administration and for its services to the District residents after the third year of the Exemplary Project when Federal funding ceases.

NCTI District Objective No. 7 will be considered first for purposes of this report. Objective 7 states that NCTI is "to provide area leadership, educational programs, education services, using the District's facilities consistent with the institutions' objectives desired by persons of the District". The writing of the

proposal, and the funding of it, in which are recognized the staff services and activities now provided or provided insufficiently is evidence of leadership. The effort to reach populations hitherto reached partly or not at all, to assist persons with the development of self-awareness and career awareness at all age levels is a new thrust or a long delayed one. A few examples are, providing assistance to school with materials and demonstrations in the classroom dealing with self-awareness and career awareness in grades K-14, job exploration workshops held at the NCTI where high school students could engage in actual work experience in the various laboratories of NCTI, working with parents of undecided high school seniors and to provide guidance services in the schools where the services were either non-existent or were inadequate. At the adult level 16 years and over services were provided to enrollees at the Store Front School, to persons who came to the intake supervisor of the Marathon County Scoial Services, cooperating with the Job Services and the Community Action Program, and assisting the Senior Citizens. The staff of the Project was successful in articulating the efforts of the departments of the NCTI with their counterparts in the public school system.

The second District objective for purposes of this evaluation is Objective No. 4 which pertains to assistance to persons in self-evaluation and determination of career direction through testing, counseling and guidance so that they may through education realize their maximum employment potential. Objective No. 4 was implemented or enhanced through the Project staff's efforts with persons taking the General Education Developmental Testing Program and the counseling and educational program that was set up to be followed by the applicant. This objective was carried out by working closely with those adults who were enrolled in the Adult Basic Education Program. The introduction of these persons to self-awareness and career awareness and the implementaiton of a program of education

which went beyond the basic 3 Rs was an innovation. The entire program with schools K-14 was in fulfillment of this NCTI objective. This was especially significant in view of the many small rural schools in the NCTI District.

The third NCTI objective of significance to the Project, Objective No. 5 deals with "opportunities to remove deficiencies according to individual needs of people who lack adequate proficiency in background courses necessary for success in the vocational or technical curriculum they seek to pursue". Persons included in this objective have been mentioned above. The Project staff very definately extended themselves in their efforts to seek out and to encourage and assist persons with deficiencies. As great as they feel that the need was to seek out these persons and to assist them and even though they coordinated their efforts with other agencies, their effort proved to be less successful many times due to the personal characteristics of the persons to be helped. A more complete description of the efforts of the Project staff will be found in later sections dealing with "Adults 16 Years and Over", "Women" and "Agencies". The list is sufficient and it is most important at this point to point out that the efforts of the Project staff have demonstrated a real need for the NCTI staff and Area Board to give real consideration as to how to best serve these populations in their fulfillment of their objective.

The Project staff members were not unmindful of the remaining objectives of the NCTI and they attempted to fulfill them as they encountered persons who fell into the respective area of operation delineated by the objectives. However, the concerns which prompted the development of the Project where concerns related to the 3 objectives of the NCTI described above.

Observations

The Project is entering its third and final year. Generally, these Federal projects are demonstration projects as the term "Exemplary Project" indicates.

It is assumed that Federal funds were sought to demonstrate a need and that if beneficial results were found that local authorities would provide funding or find other sources of funds, to continue to provide for these needs.

The experiences of the Project staff clearly indicate that the objectives of the NCTI listed above were not being met or met inadequately when offered to the populations mentioned above. The following observations are briefly stated in preparation for the recommendations to follow. A fuller treatment is given in the sections to follow in the next chapter.

1. The best intentions and efforts of the Project staff too often were frustrated by the personal characteristics of those whom they sought to help. They were prevented from dealing with them in groups such as those in classes or in other captive situations. Most of these persons are best dealt with on a one to one basis.
2. The staff found that agencies which dealt with the same prospective clientel were cooperative and that they offered valuable help.
3. The acceptance of the staff in the elementary and secondary schools and the many services rendered is an indication that the services are needed very much. Witnesses from the small shcools were impressive. The larger schools appreciated the additional services provided as well as the cooperative use of bibliography and materials of instruction.
4. The efforts at the articulation of instructional activities and programs at the NCTI with those in the secondary schools opened up new vistas for instructional personnel at the secondary schools, and the NCTI, as well as for the secondary school students.

Recommendations

The efforts of the Project staff have been extensive and noteworthy. From

the beginning, it was obvious that even with the best intentions and the best efforts that the staff could not fulfill completely all the objectives that were set forth in the proposal. This is to say that a way must be found for carrying on the work that the staff has so significantly pointed up. The following recommendations are presented for the NCTI administration.

1. The administration of the NCTI should establish a formal liaison with social service agencies in order to work with adults for whom the agencies fill a primary need. It appears that whenever a primary need is fulfilled for an adult the project staff achieved a degree of success which would not have been gained without the cooperation of the agency.
2. The administration of the NCTI should seek the cooperation of public school administrators to establish a position in the Cooperative Educational Services Agencies of the NCTI District to assist schools in implementing Career Education. These persons should be qualified to assist with curriculum implementation by means of management by objectives.
3. The administration at NCTI should make formal provision for staff to articulate the vocational programs in the secondary schools with the vocational-technical programs at the NCTI, and to be of assistance to the person in the Cooperative Educational Service Agencies responsible for Career Education in the public and if possible, private elementary and secondary schools.

The following chapter deals with the manner in which the Project staff by various means communicated with as many of the public as possible; describes selected experiences with the broad area of Adults 16 Years and Over; Women, as a separate category of adults; the Project staff's relations with the NCTI staff and the introduction of career education into NCTI classes as well as the cooperation of NCTI staff at the time that the Project staff was trying to introduce

the Career Education concept to the elementary and secondary schools and to assist with the implementation into the curriculum of the schools; describe the project staff's experiences with the introduction of Career Education into the schools and finally a review of the Project personnel in relation to the services performed.

Another section to follow will deal specifically with the results of the tests given in selected schools as recommended in the Draft Guidelines for the Evaluation of Career Education Programs.

THE SCOPE OF THE PROJECT

This chapter consists of the following seven subsections: Communication, Adults 16 Years and Over, Women, Agency Cooperation, NCTI Staff Involvement, School Participation, and Personnel. Each section deals with an aspect of the total effort in which the Project consultants were involved and which was evaluated as best as was possible under the circumstances. After a brief description of activities some observations are made and recommendations are stated.

The following chapter will deal more specifically and at the same time, more comprehensively with the work of the project consultants in selected schools. The section on School Participation mentioned above is a general summary and was included in order to complete a description of the scope of the Project.

Communications

The Project staff announced the establishment of the Project and the services available from it by means of the media available, newspaper, T.V., radio, flyers, a newsletter, handouts and a speaker's bureau.

They appeared before local service organizations. They worked with parents and teachers at conferences and provided displays.

As time went on they produced more newsletters and issued 2,000 flyers for 3 educational programs. They appeared as guests on "55" Feedback, a radio program and the estimate was that 69,000 persons had viewed it. They also appeared

on TV emphasizing Area Employment Trends and Education and Work Opportunities for Women.

They presented the American Pie Forum over the local TV station.

Workshops, although largely meant for instruction, are means to communication when presented successfully. Such was the workshop on New Career Opportunities for Women.

Career Development displays were presented at meetings of all kinds. Classes at the NCTI such as "Going Places with Your Personality" were popular. Slide presentations produced at the NCTI were thought to be effective communicators. The excellent bibliography completed by the Project personnel as well as the materials center at NCTI were well received.

Observations

Career education may need to be defined more specifically in the minds of the various publics. It needs to be related to cnncepts that various publics may hold, rightly or wrongly. Career Education must be associated in the minds of the various publics with the idea that working is something most of us must do to exist, that there are many kinds of careers, that some persons are better adept at some careers than others, that interests can be determined and channeled. The public must know that Career Education is learning about oneself and relating one's interests and abilities to occupations (work), to learning in school in general. They need to know that Career Education is related to the job market, to employment and to the avoidance or diminution of the ranks of the unemployed.

Successful implementation and assured continuation of Career Education in schools is dependent upon public support. Public support, in addition to an appreciation of the concept and the manner in which Career Education is implemented in the schools should be demonstrated when special personnel are to be employed and additional instructional materials and equipment are to be acquired to im-

plement the instructional program.

Recommendations

It is recommended that a special project be financed to conduct a survey that would:

1. identify all the publics of a community relative to their concepts of Career Education,
2. identify the various publics in relation to those who might profit from Career Education, and
3. determine the degree of support for the implementation of Career Education at grade levels K-14 and for Adults 16 years and over.

The results of such a survey should enable a school system contemplating the introduction of Career Education to deal with the public effectively first, as to who understands the concept and is in favor of the adoption of the concept and thereby gain support for the idea. Secondly, the identification of prospective clientel for the Career Education program and their attitudes toward it would thereby enable the school staff to prepare effectively for dealing with this clientel.

Adults 16 Years and Over

This category, Adults 16 Years and Over, is a very broad category. There are persons who are 16 years and over who are not in public schools. Neither are these people permitted employment in competition with those 18 years and over. Still, they are either subject to attendance at vocational schools and/or are there for special reasons as is illustrated by descriptions to follow.

Furthemmore, there is the adult employed, the adult underemployed and the adult unemployed. There is the matter of women adults and men adults.

The effort in this project has been directed toward various adult groups. The discussion that follows deals with those 16 years and over in a general way.

It appears that the expectation was that something for everyone would somehow, in some cases at least, crystalize into a given group of sufficient size to work with effectively.

One of the earlier experiences of the Project consultants was with a group of 80 NCTI full-time students who were instructed in the use of the Job Bank.

A NCTI staff person is assigned to the administration of the General Education Developmental Tests. A general education development preparation class was instructed in the interview methods of job application. This class also provided the students with an opportunity to seek answers to general education information questions.

A girl visually impaired wanting to drop out of school was counseled to remain in school.

The consultants found difficulty in reaching disadvantaged adults. They are of the opinion that working with another agency such as the Job Service Office or Community Action Program has been more effective by assuring definite enrollment of a more cohesive and similar group of participants.

Some senior citizens have been reached through an effort by the Marathon County Public Library.

An effort has been made to reach enrollees in Basic Adult Education programs with career education programs such as self-awareness and career awareness.

Parents of high school seniors who are undecided as to their future have received help from the consultants.

The consultants experienced difficulty with attendance of meetings for adults. Apparently experiences differ from city to city.

Out-patients at the Marathon County Health Care Center have received help from the Project consultants.

The consultants have provided in-service programs for 6 members of the

Community Action Program Youth Development staff. They are planning a joint effort working with high school dropouts.

The consultants have been conducting weekly meetings at the Store Front, an alternate school program for dropouts from the public school system. This is a program supported by VISTA, The Community Action Youth Development Program and the Board of Education.

The staff is organizing to deal more effectively with rural disadvantaged. The Associate Director will coordinate the Basic Education Program because it appears that Career Education and Adult Basic Education are geared to the rural disadvantaged.

Observations

1. The diverse clientel described above is an indication of the problem of dealing with the adult in general. The desire to help everyone is admirable but it spreads a limited staff too thin. In addition, the staff has not the time to determine the reason for their success or failure in dealing with these groups.
2. Apparently, there are primary needs more important to many adults than Career Education as they see it at a given time. Therefore, they take care of their primary needs first and education is secondary.
3. The observation of the consultants may have merit that they might deal with some adults more effectively by working with other groups. Apparently, organizations such as the Job Service Office or the Community Action Program fulfill the needs of adults or their primary needs.
4. Store Front Schools have been found effective in some cities. The consultants have found thus far that the enrollment has not been sufficiently stable to offer a program effectively. An attempt will be made to stabilize the enrollment.

Recommendations

1. Limit the number of categories of Adults 16 Years and Over to be dealt with.
2. Coordinate the efforts of the Project consultants with the staff efforts of organizations who seem to command the continued attention of the adult clientel they serve. The consultants have had some experience with this. Other recommendations appear in the section on Agencies.
3. The disadvantaged need to be sought out. For a while they may need to be dealt with on a one to one basis. The consultants need to use the case study approach and keep records as does any clinician in order to offer guidance and to observe and record progress.

Women

The movement dealing with the status of women has been sufficiently effective so that they received their share of attention among adults by the Project consultants. The consultants worked with women's groups such as the Women's Group at the U.W. Marathon County Center. At a particular time they met with Norma Briggs, Executive Director of the Governor's Commission on the Status of Women. On the other end of the spectrum they have had a fair amount of success in working with the Mother's Club, a welfare group, an AFDC group known as the Tuesday Morning Mothers Group.

The YWCA has a women's group who call themselves Holiday From Apron Strings. They viewed the filmstrip "Women Today".

Tuesday Morning Mother's Group viewed the filmstrips "Women Today", "Women at Work" and self-awareness film strip "Why I Am Afraid To Tell You Who I Am". At another time this group viewed the filmstrip "You are Important".

The consultants organized a "New Career Options for Women Workshop-Promoting the Development of Girls and Women". One hundred and fifty women attended.

Another program was organized around trends for women's awareness of the status of women and self-awareness. This program was presented in 6-2 hour sessions with an enrollment of 16 women. The program included the filmstrips, "Women Today", "Why Am I Afraid To Tell You Who I Am", and "You Are Important".

The consultants have met with the members of the University of Wisconsin Women's Center group to plan activities for women in the community. At the same meeting the filmstrip "Women At Work" was presented. Also a plan was developed for a workshop on "Sexism in Education".

Observations

1. The present concern for the status of women, and a working group obviously with some prestige has given emphasis to career education for women. It is a good nucleus to work with and the consultants have capitalized on it to their=credit. However, the question arises as to just how much was accomplished. Nonetheless, the illustration bears out the point made by a consultant that working with an established group gives greater impetus to successful career education.
2. Another established group to work with and with some success is the Tuesday Morning Mothers Group. This group which obviously does not have the advantages of the U.W. Women's Center is worthy of the consultants effort. Furthermore, a planned program with definite plans for measuring progress would be rewarding.

Recommendation

1. Consultants should concentrate on working with the Tuesday Morning Mothers Group because they are a disadvantaged group. If necessary, use the case study approach to enable the consultant to be productive as well as to measure progress.

2, When working with groups, establish a specific goal or set of goals and determine whether these were achieved. Determine methods of evaluation in advance, possibly with the members of the group. This insures not only effective presentation but assures the group of meeting its needs.

Agency Cooperation

Project personnel have sought the assistance of agencies in carrying out objectives of the Project. This is very much to their credit and is likely to be very productive and of permanent value to the NCTI as well. Not all of the agencies may be listed here but the list is an indication of the agencies that share an interest in Career Education and education generally.

Immediately, the consultants conferred with the public schools of the area. Since the schools in the District have a district organization of their own (not necessarily coterminus with the NCTI District) the consultants sought the cooperation of the Cooperation Educational Service Agencies (CESA).

The chambers of commerce were sought out in several cities. Business, Industry and Education Days were used to an advantage for the schools, the community and the purposes of the Project.

The Job Services Office and the Community Action Program Group were appealed to for assistance and cooperation. WIN and CETA groups were sought out.

The civic clubs such as the Kiwanis Club and the Lions Clubs served as a means of publicizing career education and the purposes of the Project.

The YMCA already had a number of organizations that responded to the appeal of the consultants such as the Holiday From Apron Strings Group and the Tuesday Morning Mothers Group.

The U.W. Marathon County Center was the nucleus for the University of Wisconsin Women's Center and this group appears to be an effective ally in working

with women in the community.

The Marathon County Health Care Center and the Marathon County Social Services provide a source of persons whom the Project consultants can help.

The Marathon County Public Library has a clientel to be served by the Project. Furthermore, the Library has facilities as well as program personnel to put at the disposal of the Project personnel.

Observations

1. The Project staff has successfully gone to various agencies for cooperation.
2. The agencies have responded generously and opened up doors to various types of persons in need of assistance which the Project staff can offer.

Recommendations

1. Continue to work with agencies to procure clientel.
2. Attempt to integrate the efforts of the agencies and the Project consultants when objectives appear to merge or are duplicated. The professionals in all these agencies have similar problems concerning clientel and their problems are similar to those of the Project personnel. Therefore, pool resources as often as possible.

NCTI Staff

The part played by the instructional staff and the administration of the NCTI is vital to the continuation of Career Education after the Project is terminated. Whereas the Project staff members have demonstrated Career Education in some of the classes of the vocational and technical programs, a number of vocational and technical program instructors have begun to incorporate Career Education in their courses. This experience on the part of the Technical Institute instructors enables them to deal understandingly with their counterparts in the public schools as well as adult groups.

The Director and Associate Director have participated in the articulation meetings of the Local Vocational Education Coordinators (LVEC).

The Project consultants conducted sessions with classes, demonstrated materials and conducted individual counseling as a means of incorporating Career Education into several NCTI programs.

The Project personnel arranged articulation meetings to be held between instructors at the NCTI and representatives from 17 district high schools.

Tours at the NCTI were arranged for students and parents. A Cluster Buster Symposium in marketing, and contests in business and agriculture were held. As a joint effort between the business department and the Project, a questionaire to determine the time and subjects for further group articulation was presented to approximately 50 secondary school business education teachers at the Wisconsin Education Association meeting.

Efforts have been made to involve instructors at NCTI in Career Education through the semester in-service meetings, flyers were produced, planning meetings conducted, and classroom demonstrations held. Racks containing brochures with information on programs at NCTI and career development have been delivered to schools as a cooperative effort to student services.

Slide tape presentations developed by NCTI instructors at the Career Exploration Workshop For Students Involved in Youth Work Experience Programs have been completed and are currently being circulated through the NCTI library.

Observations

The Project staff has been permitted by instructors in the vocational and technical instructional programs to demonstrate Career Education in their classes.

A few instructors are beginning to introduce Career Education in their classes at levels where Career Education can make a contribution.

Recommendations

1. Continue to maintain and develop still further articulation between the Project staff efforts and instructional personnel of the NCTI.
2. Continue to use the resources and instructional personnel of NCTI for the development of materials of instruction for use in the public schools.

School Participation

This section is intended to serve as a summary review of the manner in which the schools were opened up to the Project consultants. It also points up arrangements provided in the schools intentionally or otherwise by means of which the Project consultants served the faculty and students of these schools. The next chapter will deal with some of the results in the schools of the efforts of the Project staff.

There were a total of 25 schools involved, including elementary schools, middle schools, junior high schools, senior high schools and a Catholic elementary school and a Catholic high school. All schools in the District were invited to join the Project.

These schools were serviced by five consultants representing the Project. One of these consultants was located originally at Medford, Wisconsin to serve the schools in the Western and Northern reaches of the NCTI District. Another consultant was located at Antigo to serve the schools in the Eastern and Northeastern reaches of the District. The other three consultants served at the Central area and Southern section of the District.

After a general meeting of all school administrators letters were sent out again inviting all schools to participate. Enclosed in the letter was a copy of Potential Services in Career Education. The information provided by the responses to this inquiry plus a Careers Inventory Survey for high school

seniors served as entrees to work with the schools. An additional activity to encourage participation in the Project was the Career Exploration Workshop held at the NCTI. Students attended and were able to try out their abilities, skills, and interests in the various departments of instruction at the NCTI.

Generally, after superintendents of schools were satisfied with the intent of the Project, consultants, and the scope of the program projected by the consultants, the consultants met with counselors, LVEC's and teachers. The school counselors were looked to by the consultants as the coordinators or the persons to run interference for them with teachers and administrators. In some instances the administration selected Career Education Committees. The consultants found that their activities were more successful in those schools where the administrators continued to manifest a vital interest in the Project.

Project consultants had relatively free access to teachers. Consultants worked with entire departments of subject matter groups, grade level teachers and with individual teachers. In some instances, Project consultants met with individual teachers by appointment and in other instances the consultants were available in a given room and teachers were able to confer with them at their convenience. Many times the lunch hour was the most convenient time for the teachers to confer with the consultant. One school system provided substitute teachers to permit the regular teachers to attend meetings that extended over a period of 3 days. It would appear that more school systems could organize for scheduled in-service purposes as did the school system just mentioned if not for so extended a period of time.

The purpose of this evaluation is not to review in detail all of the activities in the schools. These can be found in the quarterly reports issued by

the Project Director, Dr. Russell Paulson.

The career interest surveys completed by high school seniors and the Potential Services in Career Education provided the scope of services available from the Project Consultants. The Project has an extensive library of instructional materials and equipment to loan to schools. In addition, courses were offered for credit in cooperation with U.W.-Stout. Classroom demonstrations were conducted by means of mini-courses.

The activities that were developed by the respective school faculties and students are of interest. Again, a detailed listing and description is not the intent of this report. However, some highlights are in order. One school system organized a mobile unit to move among the elementary schools to give students the experience of taking simple equipment apart and to put it together again. Another school developed a career program for retarded children.

Another school system set up a two week workshop to develop an 80 page handbook which included guidelines, objectives and goals to be adopted by the school administration to be used system wide. For the same community the Professional Women's Club volunteered help to implement the Career Education program in the schools.

One of the area school systems set up a 3 day "Community-Schools Career Education" program. Substitute teachers were provided. During this time classroom demonstrations were given, panel discussions were held involving students and teachers. Instructional materials and audio-visual presentations were set up for students and teachers.

New teachers needed to be introduced to and oriented to Career Education. A special effort was made in one system as a means to carrying on effectively where a previous teacher had left off.

Career Resource Guides and Community Resources Guides have been developed by several schools.

Career Development Days for students and faculty have been set aside by some schools.

Other schools have seen the necessity for the establishment of Parent-Teacher Conferences and often in connection with these conferences information films have been shown such as "Future Shock" and "The World of Work".

In some instances consultants have been available to students, parents, and teachers meeting together.

Faculty members at one school indicated that materials of instruction were more important for high school teachers whereas elementary school teachers rated in-service education more important.

Coordination among agencies serving the entire community is an effective aid to Career Education. In one community, all the agencies serving the community participated in the development of a Community Services Guide to Career Education.

Smaller schools have found it profitable to arrange for schools coming to a convenient location to make better use of the consultant's time and also to share ideas.

A draft copy of the "Guidelines for the Evaluation of Career Education Programs" was introduced during the latter part of the year. An attempt was made to establish treatment and control groups of some of the schools to determine any progress in Career Education especially in self-awareness and career awareness. Commercially produced tests recommended in the Guidelines were used. Test results will be discussed in the Chapter on Evaluation at Grade Levels 3,5,9, and 12.

The consultants were of the opinion that the adults with whom they had worked would not respond either in groups or as individuals to the use of tests such as

recommended by the Guidelines.

There is no doubt that the school systems of the NCTI District have accepted the Project consultants and the concept of Career Education, although they may have done so with varying degrees of effectiveness. Furthermore, their accpetance is testimony also to the leadership and services provided by the Project personnel.

Observations

1. Project consultants have observed that they are most satisfied with their progress at those schools where there is active support by the administration.
2. One of the schools in which it appears that a great effort was concentrated in 2 or 3 days provided substitute teachers to release teachers to work with students and parents on Career Education projects.
3. Another school made a special effort at the induction and orientation of new teachers to the program.
3. One of the superintendents of schools appointed a Career Education Committee consisting of faculty members to develop a guide for the introduction of Career Education into the system.
5. In some communities citizens organizations participate in the development of community resource guides.

Recommendations

1. Be sure that someone in a school system keeps the top administration informed about the progress of Career Education in a given system.
2. Encourage the release of teachers from classes by means of substitute teachers.
3. The induction and orientation of new teachers into Career Education should be encouraged.

4. The appointment of committees of teachers to plan guides for Career Education for adoption by the administration should be encouraged. Such teacher participation in policy formation makes for continued success of Career Education.
5. Encourage ad hoc citizen participation wherever they can help develop and strengthen the program.

Personnel

The Director and Associate Director have attended national conferences to keep abreast of developments in Career Education. The Director has offered UW-Stout credit courses in Curriculum and Methods in Career Education. Consultants have attended state wide meetings of the Personnel and Guidance Association.

Director and Associate Director have conducted articulation meetings with NCTI staff and LVECs.

The consultants have directed in-service programs in the public schools and with individuals.

Business, Industry, Education Days sponsored by chambers of commerce have been attended by the consultants.

Service clubs have been opened to them to tell their story.

They have presented filmstrip showings at the Marathon County Public Library.

The incorporation of Career Education into the classes at NCTI is to their credit.

A review of their dealings with agencies attests to their accpetance with them.

They have been willing to meet with parents of undecided seniors, and with teachers during their noon hour.

As a means of attracting more adults to the Career Education program, and as a more efficient, effective use of personnel, the Associate Director has also taken on the responsibilities as Coordinator of Adult Basic Education at NCTI. Since both programs are geared for the rural disadvantaged adult, many of the responsibilities are overlapping. Another consultant will be hired to assume the consultant role in the schools which have been served by the Associate Director.

A review of the previous sections dealing with Communication, Agency Cooperation, Adults 16 Years and Over, Women, working with the NCTI staff and the consultants work with the schools leaves no doubt that much has been accomplished by the consultants in their attempt to make the communities and schools Career Education conscious. However, this is largely based on observation, and observation that is based on the evaluators assumed knowledge of conditions prior to the introduction of the Career Education concept.

Observations

1. An integral part of the evaluation of personnel is the establishment of objectives, activities and outcomes as outlined above for a project and its subsidiary parts.
2. Job analysis and job descriptions are important to employer as well as to employee in that each must know what is to be done and what is considered to be normal accomplishment.
3. Growth of personnel and special advancements of the project are designated as job expectations, in other words, expectations over and above the normal activities to get a given job done. The latter may be illustrated by a consultant working with a school. The normal outcome would be for teachers to accept the instruction of a consultant and apply it in the school situation. The student would do well on a career development assessment and parents would seek the consultants' counsel. However, the determination of

the administration to release a teacher or teachers and employ substitute teachers or add paraprofessionals to enable the teachers to attend an in-service program or to plan or to produce special materials would be considered a job expectation over and above the normal routine.

The evaluation of cousulting and supervisory personnel presents some hazards because the object of change is twice removed and often more. In other words, between the administrator or the Project Director and the student or the recipient are the consultants and the teacher and possibly others. Consequently, a constant alertness to obstacles of success and changes by all personnel involved is important. Frequent consultations between teachers and consultants and the consultants and the Director are most important and the establishment of formalized procedures to maintain such communication is imperative. The consultants were aware of communication problems and as a result located their offices in Wausau rather than reducing distance by locating consultants in regional offices. Furthermore, they soon discovered that each had special contributions to make and then not only pooled their resources but also worked in each other's territories.

Recommendations

1. That objectives, activities and outcomes established for the Project and for subsidiary aspects of the Project be constituted as an aspect of personnel evaluation.
   a. Specific objectives for subsidiary components of the Project along with the general objectives should be stated. Objectives are guides to action and the greater the specificity, the more likely is the effort of the consultant to be directly related to the ojbective.
   b. Specific anticipated activities to be conducted by the consultants in their efforts to carry out the purposes of the Project should be stated.

These may be modified from time to time as circumstances may dictate.

c. Specific outcomes anticapated by the consultants resulting from their efforts to implement the objectives should be listed. Variation in outcomes can always be explained and many times justified. Outcomes may be demonstration of skills, verbal or physical, they may be interactions among persons and they may be written responses.

These statements submitted prior to the signing of an evaluation agreement will serve as a means to arriving at a consensus between the Project personnel and the evaluation team concerning the method of evaluation.

The benefit to be derived from such an understanding would enable:

a. the consultants to pursue a more purposeful activity

b. the consultants to direct their energies to specific targets

c. the evaluators to eliminate as much bias as possible since they would be looking for specific pre and post data rather than relying on the possibility that they may understand the clientel's previous condition.

Specific items furnished by the consultants to be evaluated would be more likely to produce a more fair assessment of the consultant's efforts. The evaluators should evaluate on the basis of stated anticipated outcomes and of the effort put forth by the consultants rather than the evaluators expected outcomes and the effort the evaluators think the consultant should have put forth. The latter point of what the evaluators believe the consultant should have done in preference to what he did is a question that can be discussed after the evaluation.

2. That job analysis and job descriptions be instituted to enable consultants to know what is considered normal accomplishment.
3. That expectations of job performance beyond the goals of normal accomplishment be established.
4. That formalized procedures for constant communication be maintained and improved whenever possible.

EVALUATION AT GRADE LEVELS 3,6,9, and 12

The Project staff has been working intently for about one and one-half years with the school staffs introducing Career Education into the curriculum. Teachers, not all, have accepted the challenge to implement Career Education and have taken it on as an additional assignment to their regular duties in most instances. Sources for Career Education have been books, articles, lectures, films, workshops and a course offered by the University of Wisconsin-Stout. After 18 months of Project activity some measure of progress is in order.

Standardized tests were introduced as a means of evaluation because through the standardization process objectives have been arrived at which are generally accepted. All students are responding to the same questions. In fairness to those associated with the Project the use of standardized tests was not anticipated in the evaluation in the Project proposal, in fact, the Guidelines had not been issued. Consequently, there are bound to be variations in what different teachers taught and counselors advised. Nevertheless, the attempt to use standardized tests may be a more fair basis for evaluation to the grantor of funds as well as to teachers, students and Project personnel than on the spot observation by the evaluators.

Furthermore, this is an evaluation midway through the three year Project. The use of standardized tests at this time will set more specific goals, will cause teachers to be more selective in their means of implementation, and be more conscious of specific outcomes for the third year in their participation in the Project.

The tests recommended by the Guidelines were submitted to the consul-

tants for their evaluation in terms of which test, in their opinion, was appropriate to measure what had been implemented in the curriculums including the counseling activities. They selected the Self-Observation Scales Form A, 1974 published by the National Testing Service, Arlington, Virginia, and Career Education Cognitive Questionnaire Form A, 1974 published by the Minnesota Research Coordinating Unit For Vocational Education, University of Minnesota, Minneapolis, for grades 3 and 6. The Assessment of Career Development test of the American College Testing Program and published by Houghton Mifflin Company, Geneva, Illinois, was selected for grades 9 and 12 because the Project staff was of the opinion that its contents were appropriate for the Career Education content implemented in the curriculums of the schools and introduced by the counselors in their counseling.

The introduction of these tests after 18 months of Project progress created some problems since neither the Project staff nor the school staffs were prepared for it. Nor did the Project staff anticipate their selection of treatment and control schools. Consequently, the Project staff selected those schools as treatment schools and grade levels at which the teachers and administration had been most receptive to Career Eduction and had done some implementing. Schools and grades selected for the control group were those who were not opposed to any implementation but who, in the opinion of the Project staff, in comparison with the schools in the treatment group had not progressed as far in their implementation efforts and who were not opposed to administering the tests.

The groups were not selected as being representative of all the elementary and secondary schools in the North Central Technical Institute District. They represent only themselves. They are equated only in the sense

that all are schools in rural farm and non-farm areas with a similar ethnic population mix. To repeat, there are a number of reasons for the introduction of these tests; one, the test method appeared to provide a more objective evaluation of the progress, if any, of the implementation of Career Education into the schools than an on the spot observation; two, to acquaint Project staff and school staffs with these tests; and three, to establish more definite goals, to assist teachers and counselors to be more selective in their methods of implementation, and for teachers and counselors to arrive at more consistent pursued outcomes for the final year of the Project.

The sections to follow will deal with the test results for Self Awareness - Grades 3 and 6, Career Awareness - Grades 3 and 6 and Assessment For Career Development - Grades 9 and 12.

SELF AWARENESS
GRADES 3 AND 6

The variables with which the evaluation was concerned for Grades 3 and 6 included Self Acceptance, Self Security, Social Maturity,, Social Confidence, School Affiliation, Teacher Affiliation, Peer Affiliation and Achievement Motivation. Naturally, the test results were given in scores although, for purposes of this evaluation and for the sake of brevity, the results will be given in terms of the significant differences of the means between the control and treatment groups.*

Grade 3

The variables with which the evaluation was concerned for grades 3 were Self-Acceptance, Social Maturity, School Affiliation, Self Security and Achievement Motivation. High and low scores identify children as follows:

*See statistician's note at the end of the chapter.

Self Acceptance: Children with high scores view themselves positively and attribute to themselves qualities of happiness, importance and general competence. They see themselves as being valued by peers, family, and teachers. Children with low scores see themselves as unhappy, lacking in general competence and of little importance to others.

Social Maturity: Children with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They have learned the importance of such notions as "fairplay," "sharing," perseverance, "helpfulness, and "generosity." Children with low scores on this scale have not learned these notions and are likely to evidence behaviors that most adults would characterize as selfish, inconsiderate or immature.

School Affiliation: Children with high scores view school as a positive influence in their lives. They enjoy going to school, and they enjoy the activities associated with school. Children with low scores view school as an unhappy place to be. They do not enjoy most school related activities and are negative about the importance of school in their lives.

Self-Security: Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale vary a great deal. They are concerned that something bad may happen and report feelings of nervousness.

Achievement Motivation: This is a special scale, relating achievement and ability to self concept. High scores indicate increased probability that the child will achieve well with relation to ability, low scores indicate increased probability that the child will not achieve as well as might be expected on the basis of his ability. This scale is considered to be experimental, we recommend that its use for individual assessment be deferred pending the results of our current program of confirmatory analysis.

Table I presents the data for Self-Awareness for Grades 3 at the Primary Level. The data are presented in terms of the significant differences of the statistical means of the control and treatment groups.

TABLE I

SUMMARY OF TEST RESULTS FOR SELF AWARENESS FOR GRADES THREE

Variable	Sample Mean For Control Group	Sample Mean For Treatment Group	t-Value 2 df's	Significance Level
Self-Acceptance	49.64	50.46	.19673	A*
Social Maturity	52.13	50.88	-.32812	A
School Affiliation	47.89	45.15	-.5334	A
Self Security	52.55	53.00	-.16766	A
Achievement Motivation	48.79	48.17	-.19621	A

*A - Significance level greater than .15

Test Interpretation

There are no significant differences between the control and treatment groups.

Observations

That there are no significant differences between the control and treatment groups is not surprising. At this grade level teachers may still be more conscious of the variables included under the classification of self awareness, more so than teachers at the more advanced grade levels. Consequently, the treatment group teachers may not have differed much in their efforts from those of the control group, particularly so, since the teachers did not anticipate a testing of their efforts when they joined the Project.

Furthermore, the very broad spectrum of the Project dealing with many publics of which the schools were only one public and grade 3 only one of 12 levels of this public may have prevented the Project staff from devoting

sufficient time to this grade level.

Dealing with fewer publics and a determination of specific objectives and outcomes at the beginning of the Project probably would have produced more identifiable results.

Some of the observations made by Dr. Billie Rader in the following section on Career Awareness, Grades 3 and 6 may be applicable here.

Grade Six

The additional variables for grades 6 were Social Confidence, Teacher Affiliation and Peer Affiliation. High and low scores identify children as follows:

> Social Confidence: Children with high scores on this scale feel confident of their ability to relate successfully in social situations. They feel confident that they can make friends easily. Children with low scores have difficulty making friends, do not feel valued by others and see other people as being more socially adept than themselves.
>
> Teacher Affiliation: Children with high scores on this scale like their teachers. They see the teacher as helpful, attentive, understanding and generous. Children with low scores see the teacher as arbitrary, inconsiderate of children, and/or as a source of emotional pain.
>
> Peer Affiliation: Children with high scores on this scale consider their relationships with other children to be both of high quality and of considerable importance to them. They see themselves as approved and valued by their peers. They like to be with other children. Children with low scores do not see their peer relationship as an asset. They see other children as unfriendly. They have few friends and do not accept the responsibilities of friendship.

Table II presents the data for Self Awareness for Grades 6 at the Intermediate Level. The data are presented in terms of the significant differences of the statistical means of the control and treatment groups.

TABLE II

SUMMARY OF TEST RESULTS FOR SELF AWARENESS FOR GRADES 6

Variables	Sample Means For Control Group	Sample Means For Treatment Group	t-Value 2 df's	Significance Level
Self Acceptance	52.63	52.76	.08585	A*
Self Security	50.83	50.42	-.20901	A
Social Maturity	53.69	52.49	-1.0270	A
Social Confidence	55.07	54.42	-.2919	A
School Affiliation	47.56	50.68	2.1349	A
Teacher Affiliation	51.16	50.22	-3.8923	.06
Peer Affiliation	53.30	53.01	-.43224	A
Achievement Motivation	49.71	50.66	1.42636	A

*A - Significance level greater than .15

Test Interpretation

Students in the treatment group of schools saw their teachers as more helpful, attentive, understanding and generous than the students in the control group schools. The difference was statistically significant. It was the only variable statistically significantly different among the 8 variables.

Observation

A further investigation into the selection and employment of teachers as well as an investigation of the environments of the treatment schools and control schools for teachers and students may reveal the reason for the differences.

CAREER AWARENESS

GRADE LEVELS 3 AND 6

This section will vary in format from the others. Dr. Billie Rader, senior author of the Career Education Cognitive Questionnaire handscored the Primary and Intermediate Level Tests and wrote an analysis and interpretation of the tests along with making some observations as a result of his experiences. Consequently, this section consists largely of quotes from his report.

The test for the Primary Level was designed to meauure the competencies of identification, recognition, and multiple discrimination. It measures the following types of awareness concepts. 1) industries and job titles, 2) occupational level, 3) worker ability requirements, 4) worker satisfaction, and 5) working conditions.

The test for the Intermediate Level measures the following types of awareness concepts: 1) industries and job titles, 2) occupational and educational levels, worker abilities and requirements, school subjects as they relate to work requirements, worker satisfaction, working conditions, and decision making process.

> Table III shows that for third grade students the experimental group obtained a higher mean score than did the control group. The T-test for significant difference between control and experimental groups showed a significance of .20

TABLE III

MEANS FOR CONTROL VS. EXPERIMENTAL, T-VALUES, AND SIGNIFICANCE FOR GRADES THREE AND SIX

Grade	Control X	Experimental X	T-Value	Significance
3	16.45	16.8	.883	.20
6	29.9	29.2	1.662	.050

This difference would not normally be considered statistically significant. Another way of interpreting this level of significance is that the results obtained could be expected to occur by chance 20% of the time.

The data for sixth graders showed that the control group obtained a higher mean score than did the experimental group. The difference in mean scores of 0.7 was found to be significant at the .05 level.

Test Interpretation

Dr. Rader gives the following interpretation:

1. Career Education instruction in the experimental schools may have been ineffective. In other words, there may not have been any real instructional differences between experimental and control schools.

2. The Career Education instruction in experimental schools may not have been as intensive as needed to make an impact on students.

3. Control school children may have received more career education outside the classroom than the experimental students. This happens where parents of control students are blue-collar workers.

4. Validity studies have shown that there is a positive relationship between a father's occupational level and student's mean score and father's education and student's mean score. If there were vast differences between experimental and control groups in father's occupation and education, one could expect that a difference would occur between experimental student's mean score and control student's mean score without consideration of the amount of career education instruction.

Dr. Rader cites research in other states to substantiate his analysis.

> The results of this evaluation are not unlike those obtained by numerous evaluators across the country. Michigan and Ohio evaluators obtained similar results in very large career education studies. They found that in Ohio's four major cities-Toledo, Cleveland, Cincinatti, and Akron, where the career education emphasis costs an average of twenty-five dollars per student, there were no significant differences between those who receive specific career education instruction and those who did not.

Dr. Rader comments on problems in career education that he encounters in his research.

> There are problems in career education that I am presently researching. In the development of a career education evaluation instrument, a person can only sample the knowledge identified as important to career education instruction. The questions selected to tap the identified knowledge may or may not have been specifically taught in the classroom. As an example, students may be asked on an examination to identify a specific tool with a specific occupation. Unless children have been shown the exact tool and told the name of the occupation, it is unlikely that they will be able to answer the question correctly. Children appear unable to transfer and relate one occupation with another. This is especially true in the elementary schools where children are shown one tool and given an explanation about it, and then given an examination showing another tool and another occupation.

Dr. Rader then offers the following strongly held conviction.

> Possibly career education cannot be taught effectively in the elementary schools without a great amount of specific emphasis on the concepts. It has been shown through several major evaluations, including some I have done, that integration of career education with other classroom subjects is not effective. Career Education must be taught as a separate intensive session with equal time and emphasis as other classroom courses.

Observations

The results from the Career Education Cognitive Questionnaire in some respects are not surprising for several reasons. First, the use of tests as a means of evaluating the introduction of Career Education in given schools in the NCTI District was not anticipated by the teachers nor the Project consultants. Secondly, the choice of the treatment and control schools for testing purposes, while deliberate, was, in part, because the school staffs were willing to cooperate. Thirdly, the tests were given at the midway point in the life of the Project and instruction was not complete. Concepts taught may not have been clearly defined at this point in time and specific outcomes may not have been realized.

Dr. Rader's observations concerning the relationship between fathers' occupational level and students' mean score and fathers' education and students' mean score may or may not be applicable to these students who come from rural non-farm and farm homes. Unlike many city students, these students come from homes where there is a great deal of self-reliance when it comes to maintenance and repair and the use of the respective tools and equipment.

The evaluators also hold the strong conviction that there is need for a great amount of specific emphasis on concepts. Whether these concepts should be taught in separate courses remains to be seen.

Obviously, there are a number of variables which cannot be controlled in Career Education instruction in the various schools during this last year of the Project. Improvements in the effectiveness of instruction and counseling can be achieved by means of setting specific goals, improvement in the selection and use of methods and the pursuit of anticipated outcomes.

CAREER DEVELOPMENT ASSESSMENT GRADES 9 and 12

The assessment of the students' ability to pursue his career development in the treatment and control schools was based on his knowledge of occupational characteristics, his knowledge of occupational preparation requirements, a general summary of exploratory occupational experiences, his career planning knowledge, his career planning involvement and his exploratory occupational experiences related to occupational clusters.

Grade Nine

Table IV presents the data for Grade 9 for the students' knowledge of occupational characteristics, their knowledge of occupational preparation requirements, a general summary of exploratory occupational experiences, their career planning knowledge and their career planning involvement. The data are presented in terms of the significant statistical difference of the means of the control and treatment groups.

TABLE IV

SUMMARY OF TEST RESULTS FOR OCCUPATIONAL CHARACTERISTICS, OCCUPATIONAL PREPARATION REQUIREMENTS, A GENERAL SUMMARY OF EXPLORATORY OCCUPATIONAL EXPERIENCES, CAREER PLANNING KNOWLEDGE AND CAREER PLANNING INVOLVEMENT FOR GRADES NINE

Variables	Sample Means for Control Group	Sample Means for Treatment Group	t-Value 2 df's	Significance Level
Occupational Characteristics	34.46	35.11	.4905	A*
Occupational Preparation Requirements	10.30	10.55	3.4669	.07
General Summary of Exploratory Occupational Experiences	1.75	1.75	0	A
Career Planning Knowledge	23.62	25.56	3.9190	.06
Career Planning Involvement	1.66	1.32	16.0000	B**

*A-Significance level greater than .1 **B-Significance level less than .0001

Test Interpretation

The treatment group schools performed statistically significantly better in terms of knowledge of occupational preparation requirements, career planning knowledge and career planning involvement.

There was no difference between the two groups in terms of exploration of occupational experiences.

Observation

The fact that these students came from rural farm and non-farm homes may account for the two groups not to differ statistically significantly in terms of knowledge of occupational characteristics and lack of exploratory occupational experiences. This finding may have implications for the problems small rural schools have to provide this knowledge and experience.

Table V presents the data relative to exploratory occupational experiences related to occupational clusters. The data are presented in terms of the significant statistical differences of the means of the control and treatment groups for Grade 9.

TABLE V

SUMMARY OF TEST RESULTS RELATIVE TO EXPLORATORY OCCUPATIONAL EXPERIENCES RELATED TO OCCUPATIONAL CLUSTERS FOR GRADES NINE

Variable	Sample Means For Control Group	Sample Means For Treatment Group	t-Value 2 df's	Significance Level
Social, Health & Personal Services	1.70	1.78	.7990	A*
Business Sales & Management	1.76	1.69	-.9900	A
Business Operations	1.66	1.67	-.4000	A
Technologies & Trades	1.83	1.89	.54717	A
Natural, Social & Medical Sciences	1.72	1.62	1.6610	A
Creative & Affiliated Arts	1.81	1.79	-.2150	A

*A - Significance level greater than .15

Test Interpretation

There is no statistically significant difference between the two groups. The data bear out the related results in Table IV.

Grade Twelve

Table VI presents the data for Grade 12 for the students' knowledge of occupational characteristics, their knowledge of occupational preparation requirements, a general summary of exploratory occupational experiences, their career planning knowledge and their career planning involvement. The data are presented in terms of the significant statistical differences of the means of the control and treatment groups.

TABLE VI

SUMMARY OF TEST RESULTS FOR OCCUPATIONAL CHARACTERISTICS, OCCUPATIONAL PREPARATION REQUIREMENTS, A GENERAL SUMMARY OF EXPLORATORY OCCUPATIONAL EXPERIENCES, CAREER PLANNING KNOWLEDGE AND CAREER PLANNING INVOLVEMENT FOR GRADES 12

Variable	Sample Means For Control Group	Sample Means For Treatment Group	t-Value 2 df's	Significance Level
Occupational Characteristics	41.22	42.19	.76041	A*
Occupational Preparation Requirements	12.66	12.66	0	A
General Summary of Exploratory Occupational Experiences	1.84	1.78	-2.3534	.14
Career Planning Knowledge	28.11	29.96	2.7389	.12
Career Planning Involvement	1.91	1.98	1.1587	A

*A - Significance level greater than .15

Test Interpretation

The treatment group did statistically significantly better in the general summary of exploratory occupational experiences than did the control group. Likewise they scored better concerning their career planning knowledge.

Observation

Despite the statistically significant difference in favor of the treatment group the Project staff as well as the school staffs need to continue their efforts to assist students in these two areas as well as the others.

Table VII presents the data relative to exploratory occupational experiences related to occupational clusters. The data are presented in terms of the significant statistical differences of the means of the control and treatment groups for grade 12.

TABLE VII

SUMMARY OF TEST RESULTS RELATING TO EXPLORATORY OCCUPATIONAL EXPERIENCES RELATED TO OCCUPATIONAL CLUSTERS FOR GRADES 12

Variables	Sample Means For Control Group	Sample Means For Treatment Group	t-Value 2 df's	Significance Level
Social, Health & Personal Services	1.75	1.75	0	A*
Business Sales & Management	1.86	1.79	-2.4752	.12
Business Operations	1.82	1.75	-.92519	A
Technology & Trade	2.03	1.99	-.78446	A
Natural, Social & Medical Sciences	1.70	1.66	-.51210	A
Creative & Applied Arts	1.78	1.71	-.84889	A

*A - Significance level greater than .15

Test Interpretation

The treatment group scored statistically significantly better than the control group in the area of business, sales and management.

Observation

Although the treatment group did better than the control relative to business, sales and management, the Project staff and the school staffs need to continue their efforts to assist students in this area as well as the others.

Some of the interpretations and observations made by Dr. Billie T. Rader relative to the results of his tests at the third and sixth grade levels no doubt are applicable at the sixth and twelfth grade levels as well.

A great deal of caution must be exercised in the interpretation of the results of the three tests used. It must be recalled that evaluation by means of standardized tests was not anticipated by the Project staff nor the participating school staffs. Furthermore, the idea of evaluation by tests was introduced almost 18 months after the start of the Project. In view of these circumstances these schools do not represent sampling in the true sense. The schools represent only themselves.

In addition, there are the usual cautions to be observed relating to the use of treatment and control groups as well as the use of pre and post test situations. There are also the possibilities of contamination and the Hawthorne effect. Never-the-less, keeping these qualifiers in mind, the results do provide food for thought and some guide posts as the Project personnel anticipate a productive last year working with the respective schools.

The availability of standard tests in the field of Career Education provide schools with the ready means to establish objectives and anticipated outcomes as well as a means for evaluating instructional activities in Career Education. This is not to say that these tests cannot be developed locally, in fact, local development should be encouraged. However, for many school systems, the commercially produced test will facilitate the evaluation of career educational instructional activities. The tests used in this evaluation bear the 1974 copyright date. Thus, unlike in previous years, in many instances the evaluation of programs in Career Education may be measured more objectively. Measurements of this kind require that specific goals and anticipated outcomes be established.

Recommendations

1. The test results of the present evaluation should be studied by the various participating schools under the leadership of the Project staff.

2. Objectives and anticipated outcomes should be established by the participating schools.

3. These objectives and anticipated outcomes should be written and the methods of implementation and the use of instructional materials should be anticipated in the written statement.

4. The progress in each school toward the achievement of these goals and outcomes should be measured, among other ways, by means of a pre and post test.

UNIVERSITY OF WISCONSIN–EXTENSION
101-112 LOWELL HALL 610 LANGDON STREET MADISON, WISCONSIN 53706 TELEPHONE: 262-3122 (AREA CODE 608)
WISCONSIN SURVEY RESEARCH LABORATORY

July 8, 1975

M E M O R A N D U M

TO: Professor Ahrnsbrak

FROM: Charles Palit

RE: Analysis of School Data

The design of the experiment apparently involved the selection of two schools for a control group and two schools for a treatment group. On the assumption that schools were randomly assigned to the treatment and control groups, a model of the test-scores for individual students for a specific class level is:

$$x_{ij} = \begin{cases} \mu + \tau + \alpha_j + \epsilon_{ij}, & \text{if } j^{th} \text{ school is in treatment group} \\ \mu + \alpha_j + \epsilon_{ij}, & \text{if } j^{th} \text{ school is in control group} \end{cases}$$

where

μ is an overall mean level of performance

τ is the effect of the treatment

α_j is the effect of the student being in the j^{th} school, and

ϵ_{ij} is a random component peculiar to the student

ϵ_{ij} is taken to have zero mean and some variance σ_ϵ^2. We can express the mean performance of students in a school for a specific grade by

$$\bar{x}_{.j} = \sum_i x_{ij} / n_j$$

where n_j is the number of students in the school at the grade level of interest. We can also write:

$$\bar{x}_{\cdot j} = \begin{cases} \mu + \tau + \alpha_j + \bar{\epsilon}_{\cdot j}, & \text{if } j^{th} \text{ school is in the treatment group} \\ \mu + \alpha_j + \bar{\epsilon}_{\cdot j}, & \text{otherwise} \end{cases}$$

If the j^{th} and k^{th} schools are in the control group, and if we can assume that they were selected at random then

$$\bar{x}_{\cdot j} - \bar{x}_{\cdot k} = \alpha_j - \alpha_k + \bar{\epsilon}_{\cdot j} - \bar{\epsilon}_{\cdot k}$$

has mean zero; since $\alpha_j - \alpha_k$ has mean zero under the randomization assumption. On the assumption that α_j's and ϵ_{ij}'s are independent the expected value of $(\bar{x}_{\cdot j} - \bar{x}_{\cdot k})^2$ is $2\sigma_\alpha^2 + \sigma^2_{\bar{\epsilon}_{\cdot j}} + \sigma^2_{\bar{\epsilon}_{\cdot k}}$ or

$$\sigma_\alpha^2 \left(2 + \frac{\sigma^2_{\bar{\epsilon}_{\cdot j}}}{\sigma_\alpha^2} + \frac{\sigma^2_{\cdot k}}{\sigma^2_\alpha}\right)$$

The term $\frac{\sigma^2_{\bar{\epsilon}_{\cdot j}}}{\sigma^2_\alpha}$ is likely to be small by comparison with σ^2_α since

$$\frac{\sigma^2_{\bar{\epsilon}_{\cdot j}}}{\sigma^2_\alpha} \doteq \frac{\sigma^2_\epsilon}{n_j \sigma^2_\alpha}$$

where n_j is the number of students in the j^{th} school at the grade level of interest. Consequently, if we assume that the α_j's are from a normal distribution with variance σ^2_α then $\frac{(\bar{x}_{\cdot j} - \bar{x}_{\cdot k})^2}{2}$ is distributed approximately as a $\sigma^2_\alpha \chi^2_1$ variable. The same argument holds for the treatment group so that

$$\frac{(\bar{x}_{\cdot 1} - \bar{x}_{\cdot 2})^2 + (\bar{x}_{\cdot 3} - \bar{x}_{\cdot 4})^2}{4}$$

is approximately distributed as a $\sigma^2_\alpha \chi^2_2$ variable, where $\bar{x}_{\cdot 1}$ and $\bar{x}_{\cdot 2}$ are from control group schools and $\bar{x}_{\cdot 3}$ and $\bar{x}_{\cdot 4}$ are from treatment group schools.

It follows then that

$$t = \left(\frac{\bar{x}_{\cdot 1} + \bar{x}_{\cdot 2} - \bar{x}_{\cdot 3} - \bar{x}_{\cdot 4}}{2}\right) \Big/ \sqrt{\frac{(\bar{x}_{\cdot 1} - \bar{x}_{\cdot 2})^2 + (\bar{x}_{\cdot 3} - \bar{x}_{\cdot 4})^2}{4}}$$

is approximately a t-distribution with two degrees of freedom.

SUMMARY AND RECOMMENDATIONS

Anticipation of the consequences of the efforts expended during the three year Project after two years of its existence is in order. The momentum developed and the direction set during the first two years will carry the Project to its successful conclusion. Funds were used purposefully and judiciously. The local District board as well as those agencies whose purposes are of a cooperative nature, in cases such as this, for the welfare of the citizens, can choose those aspects of the Project which they find conducive to the furtherance of their objectives.

Exemplary projects are those that should set an example or set a pattern. There are those aspects of the Project which at the end of the first two years indicate a pattern to be followed once the Federal funding ceases. For these aspects it is important that efforts be started to set up or set in motion the administrative machinery, describe positions to be filled, and duties to be performed by full time and part time personnel with the District Board of Vocational, Technical and Adult Education, in other agencies, and in cooperation with other agencies. Other agencies to be directly concerned are the respective Cooperative Educational Service Agencies. Agencies with whom to coordinate the efforts of the District Board of Vocational, Technical and Adult Education are the social and welfare agencies of the respective counties along with the private agencies and local civic and professional organizations. Project personnel have worked with these agencies with some success and these relationships need to be firmed up and formalized as much as possible. It is important that no time be permitted to elapse for the understanding and appreciation of the results of the Project to become dissipated and for the lack of leadership and funding.

A great deal of the effort of the Project personnel was devoted to the education of the public to Career Education during the first half of the Project period, and understandably so. Newspapers, radio, TV, handouts, teachers meetings, panel discussions, film showings and appearances before professional and civic clubs were used to an advantage. Career Education is being introduced and implemented in schools in various degrees and with varying success without legislative mandate as in contrast to other curricular offerings. This may be a strength. What do the various publics conceive Career Education to be? To what extent do the various publics think that it applies to them? To what extent are they willing to finance it? These and related questions ought to be answered. Unless the answers to these questions and related ones are answered in favor of Career Education, the results of efforts at its implementation may be a long time in coming. The financing of such an investigation would be in order at this time. The results might lead to a clarification of the present approaches or other alternatives rather than a legislative mandate and a more firm support for Career Education in our schools and for adults out of school.

The cooperation with and the coordination of efforts with other agencies has been mentioned above. Adults who definitely were in need of assistance from the Project often were not found in organized classes or groups, and if they were, they were in an agency not directly related to the schools. Often these adults had found the fulfillment of their primary needs with a welfare or social agency supported by the government. More often these agencies were public rather than private, although not always. Personal characteristics of these individuals often were such that they were very wary of highly organized groups, at least at first. Formalized cooperative and coordinated and, hope-

fully, integrated efforts should be instituted with public and private agencies for the benefit of these adults 16 years and over.

The category of Adults 16 Years and Over is a very broad one and the category or the terminology in reference to it should be used with reservations. Often the term adult is used when the speaker has in mind a specific category of adults. There are too many categories of individuals under this general heading to talk about them meaningfully. At first the efforts to serve individuals or groups in this broad category were too diffused, first, in an effort to reach them through the media, and later, in trying to work with them in groups. In reality, efforts at contacting these people should be as specific publics and/or as individuals. After some experience, Project personnel did deal with them in groups. Furthermore, the efforts should be directed toward the disadvantaged. To be of assistance to well educated women in the cause of the equal status of women is noteworthy but the disadvantaged are in far greater need of assistance.

The efforts to evaluate personnel are hazardous. This becomes more so as the end product becomes farther removed from the source of the innovation. In the case of this Project there are at least the Project consultants and the teachers between the originator of the Project and the recipients, students or adults. These hazards can be reduced first, by a very specific delineation of objectives of the Project, a description of the activities and skills of the consultants for reaching the outcomes, and then the outcomes anticipated, the outcomes to be stated as much as possible in as near behavioral terms as possible. Secondly, these hazards can be reduced still more if before employment of personnel a job analysis is made and a job description is prepared. This job description should include a description of any specific

competencies or skills that may be required. These job specifications can be still further enhanced by a statement of job expectations. Job expectations are those activities and results of efforts of the consultants which are over and above those normally required to carry on the work of the Project. Thirdly, a continual review of the activities and problems and successes encountered by the entire Project staff are essential. To insure this constant review, the Director of the Project should formalize a schedule of such review meetings as well as provide for special meetings requested by a member of the staff. Project personnel, after a few months of experience with their organizational structures and location of consultants out in their respective territories, revised the structure and based all consultants in the central office in order to improve communication and to use the special abilities of the consultants where the respective consultants saw the need for them.

In summary, the efforts during the last year of the Federal funding should be directed in part, toward formalizing working relationships with schools and Cooperative Educational Services Agencies, and welfare and social agencies, public and private, and civic and professional organizations. Secondly, the number of publics to be served by the Project should be reduced in order that specific gains or failure of gains may be determined and in order to establish the success or failure of given methods used as a means to achieving the goals of the Project. Specific types of persons or groups should be identified with whom to work such as the schools and welfare mothers or certain categories of unemployed men and/or women.

Recommendations

1. The administration of the NCTI should establish a formal liaison with social service agencies in order to work with adults for whom the agencies fill a primary need. It appears that whenever a primary need

is fulfilled for an adult the Project staff achieved a degree of success which would not have been gained without the cooperation of the agency.

2. The administration of the NCTI should seek the cooperation of public school administrators to establish a position in the Cooperative Educational Service Agencies represented in the District to assist the public schools (private if possible) with the implementation of Career Education. Persons filling these positions should be qualified to assist with implementation of the curriculum, the establishment of behavioral objectives and the evaluation of the program.
3. The administration of the NCTI should make formal provisions for its instructional staff to articulate the vocational programs in the secondary schools with the vocational-technical programs at the NCTI and to be of assistance to the persons in the Cooperative Educational Service Agencies responsible for Career Education in the public and private elementary and secondary schools.
4. A special project should be financed to conduct a survey that would:
   a. identify all the publics of a community relative to their concepts of Career Education,
   b. identify the various publics in relation to those who might profit from Career Education, and
   c. determine the degree of support for the implementation of Career Education at levels K-14 and for Adults 16 years and Over.

The results of such a survey should enable a school system contemplating the introduction of Career Education to deal with the several publics effectively; first, as to who understands the concept, secondly, who is in

favor of the adoption of the concept and thereby gain support for it, and thirdly, the identification of the prospective clientel for the Career Education program and the attitudes of this clientel toward it in order to enable the school staff to prepare effectively for dealing with this clientel.

5. For the next year, limit the number of categories of Adults 16 and Over to be dealt with.
6. The Project consultants should firm up their coordinating and cooperating efforts with the staff efforts of organizations who seem to command the continued attention of the adult clientel they serve. The consultants have had some experience with this.
7. The disadvantaged need to be sought out. For awhile they may need to be dealt with on a one to one basis. The consultants need to use the case study approach and keep records as does a clinician in order to offer guidance and to observe and record progress.
8. Consultants should concentrate on working with the Tuesday Morning Mothers Group because they are a disadvantaged group. Again, consultants should use the case study approach to enable them to be productive as well as to measure progress.
9. Consultants when working with groups should establish a specific goal or goals and decide the means by which the achievement of these goals can be determined. Methods of evaluation should be determined in advance with the group. This would insure not only effective presentation but would assure the group that its needs would be met.
10. The professionals in all social and welfare agencies have similar problems and they are similar to those of the Project consultants.

Therefore, efforts should be continued to exchange knowledge and other resources with each other as well as to procure clientel.

11. The articulation of the efforts of the Project consultants with the instructional staff of the NCTI must continue.

12. The use of the instructional resources of the NCTI for the development of materials of instruction for use in the elementary and secondary schools is to be commended. The extent to which this must continue is dependent on the responsibilities for Career Education accepted by the Cooperative Educational Service Agencies after the Project is terminated.

13. After school administrators have given their approval to the Project consultants to work with instructional personnel, consultants work with the teachers regularly. However, Project personnel have found out that their success has been in those schools where they had the continued support of the administration. The administration of the schools must continually be informed and a definite time and procedure for doing so must be established.

14. School administrators should be encouraged to release teachers from classes and to employ substitute teachers to enable regular teachers to attend workshops, in-service training and to develop materials of instruction.

15. The induction and orientation of new teachers to Career Education should be encouraged.

16. The appointment of committees of teachers system-wide to plan guides for Career Education for adoption by school administrations should be encouraged. Such teacher participation in policy formation makes for continued success of Career Education.

17. Ad hoc citizen participation whenever they can help develop and strengthen the program should be encouraged.

18. That objectives, activities and outcomes established for the Project and for subsidiary aspects of a project constitute an aspect of personnel evaluation.

    a. Specific objectives for subsidiary components of a project along with the general objectives should be stated. Objectives are guides to action and the greater the specificity, the more likely is the effort of the consultant to be directly related to the objectives.

    b. Specific anticipated activities to be conducted by the consultants in their efforts to carry out the purposes of the Project should be stated. These may be modified from time to time as circumstances may dictate.

    c. Specific outcomes anticipated by the consultants resulting from their efforts to implement the objectives should be listed. Variation in outcomes can always be explained and many times justified. Outcomes may be demonstration of skills, verbal or physical, they may be interactions among persons and they may be written responses.

These statements submitted prior to the signing of an evaluation agreement will serve as a means to arriving at a consensus between the project personnel and the evaluation team concerning the method of evaluation.

The benefit to be derived from such an understanding would enable:

a. the consultants to pursue a more purposeful activity

b. the consultants to direct their energies to specific targets

c. the evaluators to eliminate as much bias as possible since they would be looking for specific pre and post data rather than relying on the possibility that they may understand the client's previous condition

Specific items furnished by the consultants to be evaluated would be more likely to produce a more fair evaluation of the consultant's efforts. The evaluators should evaluate on the basis of stated anticipated outcomes and the effort put forth by the consultants rather than the evaluators' expected outcomes and the effort the evaluators think the consultant should have put forth. The latter point of what the evaluators believe the consultants should have done in preference to what he did is a question that can be discussed after the evaluation.

19. That job analysis and job descriptions be instituted to enable consultants to know what is considered normal accomplishments.

20. That expectations of job performance beyond the goals of normal accomplishment be established.

21. That formalized procedures for constant communication be maintained and improved whenever possible.

22. The test results of the present evaluation should be studied by the various participating schools under the leadership of the Project staff.

23. Objectives and anticipated outcomes should be established by the participating schools.

24. These objectives and anticipated outcomes should be written and the methods of implementation and the use of instructional materials should be anticipated in the written statement.

25. The progress in each school toward the achievement of these goals and outcomes should be measured, among other ways, by means of a pre and post test.

CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION, UNIVERSITY OF WISCONSIN-MADISON

The Center for Studies in Vocational and Technical Education at the University of Wisconsin-Madison was reorganized with the support of the Wisconsin Board of Vocational, Technical and Adult Education within the School of Education in 1971. The function of the Center is to serve the State of Wisconsin in a unique way by bringing the resources of the University to bear on identified problems in the delivery of vocational and manpower programs—vocational education, technical education, adult education, career education, manpower training—to citizens of all ages in all communities of the State. The Center focuses upon the delivery of services including analyses of need, target groups served, institutional organization, instructional and curriculum methodology and content, labor market needs, manpower policy, and other appropriate factors. To the extent that these goals are enhanced and the foci of problems widened to encompass regional and national concerns, the Center engages in studies beyond the boundaries of the State.

Merle Strong, Director
Roger Lambert, Associate Director

For further information on this or other Center activities, contact:

Center for Studies in Vocational and Technical Education
321 Education Building
1000 Bascom Mall
Madison, Wisconsin 53706

608-263-3696